Section 3.3 (Solving For Rates and Times-The Rule of 72)

1. Approximately long will it take Julia to double her money if she earns 3.2% interest compounded daily?

2. Adam has $7,000 in an investment that earns 4% interest compounded monthly.
   (a) Approximately how long will it take for the investment value to reach $14,000?
   (b) Check your approximation in (a), how much money will Adam have after that length of time?

3. Adam is still investing 7,000 in an investment that earns 4% interest compounded monthly. How long will it take for the investment value to reach $28,000?

4. Max deposited $3,000 in a retirement account where he expects to earn 4.95% interest compounded annually. How long till Max has $30,000 in the account?

5. What compound interest rate is required for $18,704 to double in 10 years?

6. What compound interest rate is required for $5,000 to quadruple in 30 years?